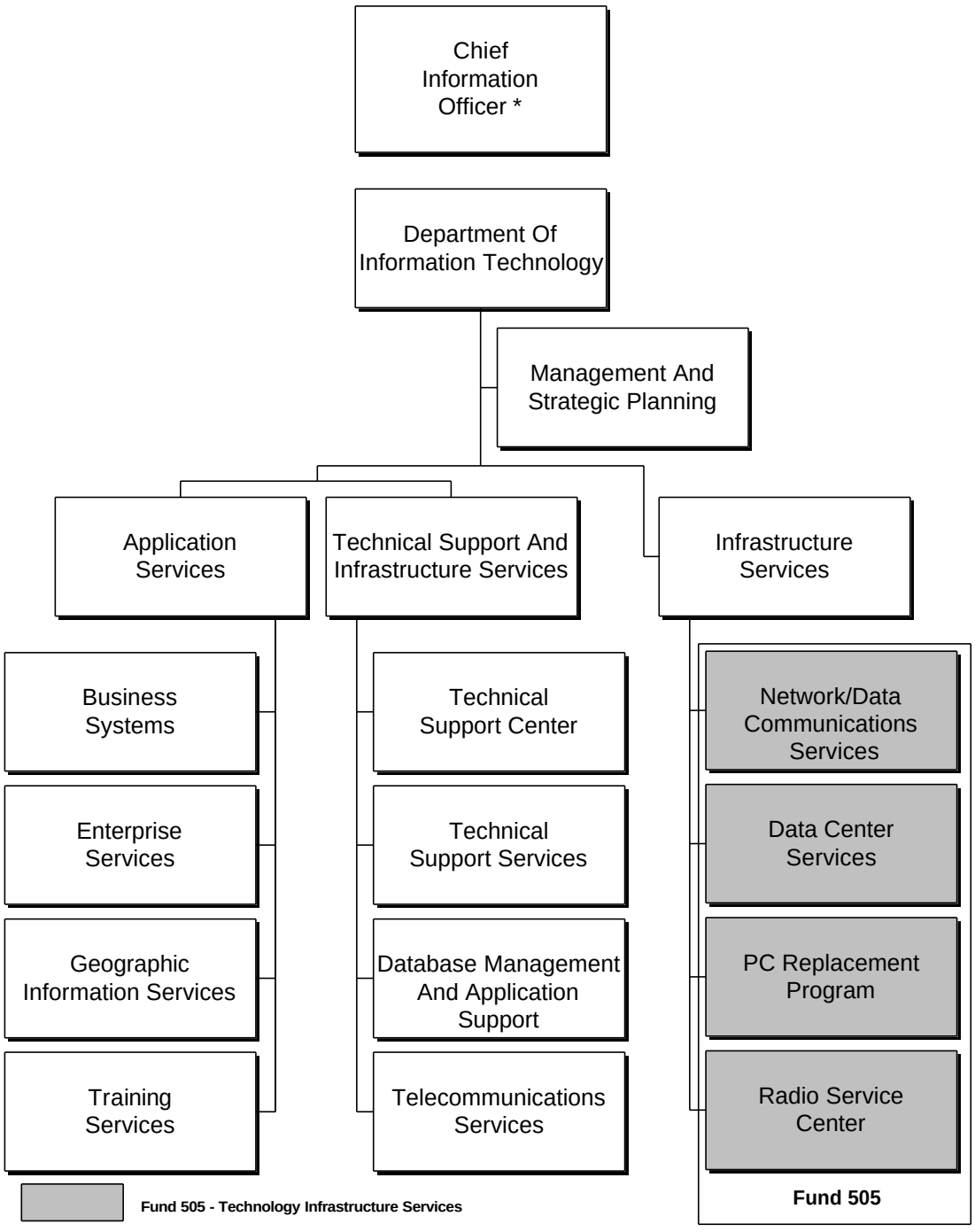
DEPARTMENT OF INFORMATION TECHNOLOGY
FUND 505, TECHNOLOGY INFRASTRUCTURE SERVICES



* The Chief Information Officer has responsibility for strategic direction and oversight of this agency; however, for budget purposes, that position and associated funding are reflected within the Department of Information Technology within the General Fund.

FUND 505
TECHNOLOGY INFRASTRUCTURE SERVICES

Agency Position Summary

Fund 001:	216	Regular Positions (-3)	/	216.0	Regular Staff Years (-3.0)
Fund 505:	*70*	*Regular Positions*	/	*70.0*	*Regular Staff Years*
	286	Total Positions (-3)		286.0	Total Staff Years (-3.0)

Position Detail Information

MANAGEMENT AND STRATEGIC PLANNING
Management, Administration & Planning

1	Chief Information Officer
1	Director of Information Technology
1	Info. Tech. Program Director II
3	Info. Tech. Program Directors I
1	Info. Tech. Program Manager I
1	Fiscal Administrator
1	Business Analyst III
1	Accountant II
2	Management Analysts II
1	Management Analyst I
2	Administrative Assistant V
2	Administrative Assistants IV
4	Administrative Assistants III
1	Administrative Assistant II
1	Administrative Assistant I
1	Info. Security Manager
1	Info. Security Analyst III
1	Info. Security Analyst II
2	Info. Security Analysts I
28	Positions
28.0	Staff Years

APPLICATION SERVICES
Business Systems

1	Info. Tech. Program Director II
3	Info. Tech. Program Managers II
1	Management Analyst IV (-1)
1	Network/Telecom. Analyst II
17	Programmer Analysts IV
17	Programmer Analysts III
15	Programmer Analysts II (-2)
55	Positions (-3)
55.0	Staff Years (-3.0)

APPLICATION SERVICES (CON'T)
Enterprise Services

1	Info. Tech. Program Director II
1	Info. Tech. Program Director I
3	Info. Tech. Program Managers II
1	Internet/Intranet Architect IV
3	Internet/Intranet Architects III
4	Internet/Intranet Architects II
10	Programmer Analysts IV
11	Programmer Analysts III
11	Programmer Analysts II
1	Programmer Analyst I
46	Positions
46.0	Staff Years

Geographic Information Services

1	Info. Tech. Program Manager II
1	Network/Telecom. Analyst III
1	Geo. Info. Spatial Analyst IV
2	Geo. Info. Spatial Analysts III
4	Geo. Info. Spatial Analysts II
1	Geo. Info. Spatial Analyst I
1	Engineer III
1	Geo. Info. Sys. Tech. Supervisor
8	Geo. Info. Sys. Technicians
20	Positions
20.0	Staff Years

Training Services

1	Info. Tech. Program Manager I
2	Business Analysts III
5	Business Analysts II
8	Positions
8.0	Staff Years

FUND 505
TECHNOLOGY INFRASTRUCTURE SERVICES

TECHNICAL SUPPORT AND INFRASTRUCTURE SERVICES

Technical Support Center

1	Info. Tech. Program Manager I
5	Info. Tech. Technicians III
1	Info. Tech. Educator III
2	Network/Telecom Analysts II
2	Info. Tech. Technicians II
11	Positions
11.0	Staff Years

Technical Support Services

1	Info. Tech. Program Manager II
1	Network/Telecom. Analyst IV
4	Network/Telecom. Analysts III
11	Network/Telecom. Analysts II
5	Info. Tech. Technicians II
22	Positions
22.0	Staff Years

Database Management & Application Support

1	Info. Tech. Program Manager I
3	Database Administrators III
3	Database Administrators II
1	Inventory Management Supervisor
1	Data Analyst III
1	Data Analyst II
10	Positions
10.0	Staff Years

Telecommunications Services

1	Info. Tech. Program Manager II
3	Network/Telecom. Analysts IV
3	Network/Telecom. Analysts III
4	Network/Telecom. Analysts II
2	Info. Tech. Technicians III
3	Info. Tech. Technicians II
16	Positions
16.0	Staff Years

(-) Denotes Abolished Position

TECHNOLOGY INFRASTRUCTURE SERVICES

Network/Data Communication Services

1	*Info. Tech. Program Director I*
1	*Info. Tech. Program Manager I*
2	*Network/Telecom Analysts IV*
10	*Network/Telecom Analysts III*
4	*Network/Telecom Analysts II*
1	*Network/Telecom Analyst I*
19	*Positions*
19.0	*Staff Years*

Data Center Services

1	*Info. Tech. Program Director II*
2	*Info. Tech. Program Managers II*
4	*Systems Programmers III*
5	*Systems Programmers II*
4	*Systems Programmers I*
1	*Programmer Analyst III*
1	*Programmer Analyst II*
1	*Programmer Analyst I*
1	*Computer Scheduler*
8	*IT Technicians III*
9	*IT Technicians II*
2	*IT Technicians I*
39	*Positions*
39.0	*Staff Years*

Radio Center Services

1	*Network/Telecom Analyst IV*
2	*Engineers II*
1	*Communications Engineer*
3	*Communications Technicians*
1	*Electronic Equipment Supervisor*
2	*Electronic Equipment Technicians II*
1	*Assistant Buyer*
1	*Administrative Assistant III*
12	*Positions*
12.0	*Staff Years*

FUND 505
TECHNOLOGY INFRASTRUCTURE SERVICES

Agency Mission

To provide the underlying technology required to assist County agencies in providing effective support to the citizens.

Agency Summary					
Category	FY 2001 Actual	FY 2002 Adopted Budget Plan	FY 2002 Revised Budget Plan	FY 2003 Advertised Budget Plan	FY 2003 Adopted Budget Plan
Authorized Positions/Staff Years					
Regular	66/ 66	66/ 66	70/ 70	70/ 70	70/ 70
Expenditures:					
Personnel Services	$4,012,271	$4,970,849	$4,970,849	$5,225,099	$5,225,099
Operating Expenses	7,975,439	13,513,629	14,409,061	13,331,139	13,331,139
Capital Equipment	1,328,734	1,022,620	1,453,206	1,220,098	1,220,098
Total Expenditures	**$13,316,444**	**$19,507,098**	**$20,833,116**	**$19,776,336**	**$19,776,336**

Board of Supervisors' Adjustments

The following funding adjustments reflect all changes to the FY 2003 Advertised Budget Plan, as approved by the Board of Supervisors on April 29, 2002:

- The Board of Supervisors made no changes to the FY 2003 Advertised Budget Plan.

The following funding adjustments reflect all approved changes to the FY 2002 Revised Budget Plan from January 1, 2002 through April 22, 2002. Included are all adjustments made as part of the FY 2002 Third Quarter Review:

- The Board of Supervisors made no adjustments to this fund.

County Executive Proposed FY 2003 Advertised Budget Plan

Purpose

The Department of Information Technology (DIT) coordinates all aspects of information technology for the County and plays an enabling role in advancing the strategic value of technology to transform work processes and provide quality services to customers. Funding for DIT activities is included in the General Fund and in two Funds that DIT manages. Fund 505, Technology Infrastructure Services, includes technology activities performed for County agencies, such as Data Center operations, enterprise data communications network, Radio Center services, and E-911 communications. Fund 104, Information Technology, funds major information technology projects including those with countywide strategic importance, such as infrastructure and application system modernization initiatives.

All Fund 505 costs are recovered from its customers, and expenditures are primarily driven by customers' requests for information technology (i.e., improved public safety radio system, enhanced telecommunication services, expanded mainframe storage, etc.).

FUND 505
TECHNOLOGY INFRASTRUCTURE SERVICES

Technology Infrastructure Services provides intra-governmental services including the operation and maintenance of the County computer center 24 hours a day, seven days per week, maintaining the County data and radio communication networks, and providing integrated communication service to all County agencies and outside customers. In FY 2003, a 5.0 percent surcharge to Infrastructure Charges will be continued in order to rebuild reserves for the future replacement and upgrade of mainframe computer equipment.

DIT also manages a PC replacement fund in Fund 505. For each PC replaced, an amount of $600 is collected per year over a period of four years, based on the estimated life cycle and future replacement cost. This reserve will ensure that funding is available for future replacements to remain consistent with the advancements in technology.

DIT is responsible for coordinating radio repair and engineering support to County agencies and the Fairfax County Public School system. In FY 2003, DIT will maintain 209 base stations, 8,316 portable radios, and mobile units utilizing both County employees and contracts with outside vendors. Operational maintenance of the radio network is of primary importance to the County public safety agencies, public works agencies, Fairfax County Public Schools, and other County agencies.

Key Accomplishments

- Implemented Virtual Private Network (VPN) technology to enhance secure remote processing. VPN technology allows authorized users to access the enterprise resources irrespective of their location via the Internet.

- Upgraded the cable within the Government Center campus to the industry standard of Category 5E. This upgrade allows users to benefit from the increased data transfer speed capabilities of new hardware and software applications.

- Provided expanded telephone services by replacing telephone systems at 25 sites and installing full telephone systems at 4 new County sites.

- Performed full engineering planning and design for voice telecommunications services in the South County building, and for major moves of Human Services and DPWES staff.

- Completed Phase II of the Wide Area Network (WAN) upgrade to increase capacity and speed of the enterprise network at 73 field sites.

- Purchased, configured and installed over 1,700 PC's under the PC Replacement Program to replace obsolete equipment in FY 2002.

- Implemented a new countywide firewall technology and provided additional perimeter security to the enterprise network.

- Implemented new data center command consoles designed to increase operations and staff efficiency in monitory and executing jobs on multiple platforms.

- Implemented the first phase of a Storage Area Network (SAN) solution to server platforms in the data center.

FY 2003 Initiatives

- Redesign the County's data network to improve redundancy, capacity, security, and flexibility to meet the needs of new applications.

- Implement multiple firewall strategies to further protect corporate data and to meet Health Insurance Portability and Accountability Act (HIPAA) and other privacy concerns.

FUND 505
TECHNOLOGY INFRASTRUCTURE SERVICES

- Continue the enterprise operation center modernization effort to improve operational effectiveness and optimize a failsafe environment.

- Purchase, configure and install 1,700 PC's under the PC Replacement Program, replacing obsolete equipment. The County program currently operates on a four-year cycle and includes over 9,000 personal and laptop computers which have been phased in during the life of the program.

- Investigate and plan for opportunities to improve and increase efficiencies in the LAN desktop environment.

Funding Adjustments

The following funding adjustments from the FY 2002 Revised Budget Plan are necessary to support the FY 2003 program:

- An increase in Personnel Services of $254,250 associated with salary adjustments necessary to support the County's compensation program.

- A net decrease of $1,077,922 in Operating Expenses primarily due to a decrease of $895,432 in one time funding carried over from FY 2001 into FY 2002 and a decrease of $500,000 for re-cabling projects initiated in FY 2002, partially offset by an increase of $240,000 for enhanced disaster recovery services to include County servers.

- Capital Equipment funding totals $1,220,098 including $545,000 for upgrades to the mainframe funded through the Computer Equipment Replacement Fund (CERF), including additional capacity and upgrades to the operating system software, $400,000 for replacement servers and $275,098 for replacement equipment as part of a multi-year Enterprise Network equipment replacement program.

The following funding adjustments reflect all approved changes to the FY 2002 Revised Budget Plan since passage of the FY 2002 Adopted Budget Plan. Included are all adjustments made as part of the FY 2001 Carryover Review and all other approved changes through December 31, 2001:

- As part of the *FY 2001 Carryover Review*, an increase of $1,326,018 in encumbered carryover, including $895,432 in Operating Expenses and $430,586 in Capital Equipment.

Objectives

- To reduce the number of business days to fulfill Telecommunications service requests for:
  - Non-critical requests from 10 days to a standard of 7 days by FY 2003.
  - Critical requests from 5 days to 4 to a standard of next business day by FY 2003.
  - Emergency requests from the next day to a standard of same day by FY 2003.
- To ensure that 70 percent of LAN/PC workstation calls to Technical Support Services are closed within 72 hours.
- To improve the resolution rate for the average first-call problem for the Technical Support Center (TSC), DIT Help Desk by five percentage points from 65 percent to 70 percent.

FUND 505
TECHNOLOGY INFRASTRUCTURE SERVICES

Performance Indicators

Indicator	Prior Year Actuals FY 1999 Actual	Prior Year Actuals FY 2000 Actual	Prior Year Actuals FY 2001 Estimate/Actual	Current Estimate FY 2002	Future Estimate FY 2003
Output:					
Responses to call for repairs (Voice)	4,645	5,230	NA / 5,335	6,560	6,785
Help desk calls (Data)	2,074	2,345	NA / 2,265	1,835	1,625
Moves, Adds, or Changes (Voice and Data)[1]	9,525	7,463	NA / 8,265	8,500	7,650
Calls resolved	3,105	12,454	11,000 / 17,503	18,378	18,929
Customer requests for service fulfilled by Technical Support Center (TSC)	18,046	36,873	41,000 / 38,869	41,000	43,050
Efficiency:					
Cost per call	$97	$109	NA / $120	$125	$110
Average number of hours annually spent per staff member to resolve calls[2]	2,070	1,407	NA / 1,407	1,407	1,407
Customer requests for service per TSC staff member	3,322	4,097	3,417 / 3,886	4,100	4,305
Service Quality:					
Customer satisfaction with telecommunication services	83.3%	NA	83.0% / 84.0%	88.0%	95.0%
Percent of customers reporting satisfaction with resolution of LAN/PC workstation calls[3]	NA	NA	60% / 91%	91%	85%
Percent satisfaction of County employees with support from Technical Support Center	85%	86%	88% / 84%	87%	90%
Outcome:					
Business days to fulfill service requests from initial call to completion of request for:					
▪ Non-critical requests	NA	15	NA / 14	10	7
▪ Critical requests	NA	7	NA / 6	5	4
▪ Emergency requests	NA	3	NA / 3	2	1
Percent of calls closed within 72 hours	NA	100%	NA / 57%	65%	70%
Percent of first-contact problem resolution	64%	69%	72% / 60%	65%	70%

[1] The implementation of Voice over IP will reduce moves, adds, or changes in the future, thereby reducing overall calls for assistance.

[2] Beginning in FY 2000, the number reflects regular and overtime hours worked (2,345 hours per staff member x 60 percent time spent on resolving calls).

[3] Decrease in satisfaction is anticipated in FY 2003 because of a scheduled Architecture Refresh program which will result in increased support requirements.

FUND 505
TECHNOLOGY INFRASTRUCTURE SERVICES

FUND STATEMENT

Fund Type G50, Internal Service Funds **Fund 505, Technology Infrastructure Services**

	FY 2001 Actual	FY 2002 Adopted Budget Plan	FY 2002 Revised Budget Plan	FY 2003 Advertised Budget Plan	FY 2003 Adopted Budget Plan
Beginning Balance	**$5,293,204**	**$5,544,240**	**$8,991,875**	**$8,326,154**	**$8,326,154**
Revenue:					
Radio Services Charges	$638,335	$791,597	$791,597	$821,674	$821,674
PC Replacement Charges	4,920,700	5,512,800	5,512,800	5,152,800	5,152,800
DIT Infrastructure Charges					
County Agencies and Funds	10,167,282	12,494,005	12,494,005	12,211,367	12,211,367
Fairfax County Public Schools	1,028,452	1,140,457	1,140,457	1,206,758	1,206,758
Outside Customers	260,346	228,536	228,536	219,725	219,725
Subtotal DIT Infrastructure Charges	$11,456,080	$13,862,998	$13,862,998	$13,637,850	$13,637,850
Total Revenue	$17,015,115	$20,167,395	$20,167,395	$19,612,324	$19,612,324
Total Available	**$22,308,319**	**$25,711,635**	**$29,159,270**	**$27,938,478**	**$27,938,478**
Expenditures:					
Personnel Services	$3,788,311	$4,555,840	$4,555,840	$4,759,571	$4,759,571
Operating Expenses	6,315,495	8,976,716	9,628,771	9,523,026	9,523,026
Capital Equipment	303,954	412,620	843,206	675,098	675,098
Computer Equipment Replacement Expenditures	2,377,314	4,251,922	4,495,299	4,273,641	4,273,641
Capacity Upgrade to Mainframe Computer	531,370	1,310,000	1,310,000	545,000	545,000
Total Expenditures	$13,316,444	$19,507,098	$20,833,116	$19,776,336	$19,776,336
Total Disbursements	**$13,316,444**	**$19,507,098**	**$20,833,116**	**$19,776,336**	**$19,776,336**
Ending Balance	**$8,991,875**	**$6,204,537**	**$8,326,154**	**$8,162,142**	**$8,162,142**
Infrastructure Replacement Reserve (CERF)[1]	2,627,427	86,511	944,205	299,788	299,788
PC Replacement Reserve[2]	6,364,448	6,118,026	7,381,949	7,862,354	7,862,354
Unreserved Balance	**$0**	**$0**	**$0**	**$0**	**$0**

[1] A 5.0 percent surcharge on Infrastructure Charges is applied to build long-term reserves for scheduled replacement of mainframe computer and network assets. The funds are held in this computer equipment replacement fund (CERF).

[2] The balance in the PC Replacement Reserve fluctuates annually based on scheduled PC replacements which are on a four-year replacement cycle.